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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 10/064,148 | 06/14/2002 | Mark A. Kappel | 126071 | 3244 |
| 27256 | 7590 | 08/27/2003 | | |
| ARTZ & ARTZ, P.C. 28333 TELEGRAPH RD. SUITE 250 SOUTHFIELD, MI 48034 | | | EXAMINER DUVERNE, JEAN F | |
| | | | ART UNIT 2839 | PAPER NUMBER |

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|-------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/064,148 | KAPPEL ET AL. <i>CJ</i> |
| | Examiner | Art Unit |
| | Jean F. Duverne | 2839 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 June 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . 6) Other:

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DETAILED ACTION

Claim Rejections - 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5-6, and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitra et al (US patent US005478248A).

Mitra's device discloses a connector assembly for a circuit board (see figs. 1-3) comprising a back plane shell (9) having guide channel at 13 disposed within the first outside surface; and a housing having a guide arm (2) extending from a second outside surface, the guide arm is sized to be received within the guide channel to align the back shell and the housing during the assembly alignment ribs and retraction features (11). The retraction at 13 is also integrally molded with the back shell. The connector assembly comprises a multiple carriers (see fig. 1)

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitra et al (US patent US005478248A).

Mitra's device discloses the aforementioned limitations, but fails to explicitly disclose the retraction features with the cup shape. It would have been obvious matter to meet design or specification choice to use the retraction features with the cup shape, since such modification would have involved a mere change in shape of a component. A change in shape is generally recognizing as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1976).

Claims 7-11, 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Mitra et al (US patent US005478248A) in view of Mouisie (US patent 4,169,642).

In regard to claims 7, Mitra's device discloses the aforementioned limitations, but fails to explicitly disclose the use of a flex circuit in the multi-boards connection. Mouissie's device discloses the use of a flex circuit (7) in the multi-boards connection. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use flex circuit in the multi-boards connection such as the one taught in Mouissie's structure for improving the interconnection of Mitra's device.

In regard to claims 8-9, 11, 18, Mitra's device discloses the aforementioned limitations, but fails to explicitly disclose the use of an interposer. Mouissie's device discloses the use of an interposer at 6 inserted between the boards. It would have been obvious at the time the invention

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was made to a person having ordinary skill in the art to use an insertion device or an interposer to make connection between the board such as the one taught in Mouissie's structure for improving the interconnection of Mitra's device.

In regard to claims 10, Mitra's and Mouissie's devices disclose the aforementioned limitations, but fails to explicitly disclose the formation the back shell as dust shield. Nevertheless base on the structure of the back shell, it is capable of being used a dust shell.

Response to Amendment

Applicant's arguments filed with the amendment on 6/5/2003 have been fully considered but they are not persuasive. In view of applicant's amendment, the examiner has restructured the rejection to meet the claims limitations. The claims as amended do not define "structural structure features" that distinguish over prior art: For example the back plane shell (9) having guide channel at 13 disposed within the first outside surface; and a housing having a guide arm (2) extending from a second outside surface, the guide arm is sized to be received within the guide channel to align the back shell and the housing during the assembly. Furthermore, the claims do not recite that the carrier boards have to be separately mounted on the circuit board. In addition, for the retraction features and the cup shape (see above rejection): the cavity at 13 has the capability to retract the inserting parts from the housing. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duverne whose telephone number is (703) 305 - 0297 . The examiner can normally be reached from 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild, can be reached on (703)308-2710. The fax phone number for this Group is (703) 308 - 7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

JFD



Jean F. Duverne

August 24, 2003

Primary Examiner, Art Unit 2839